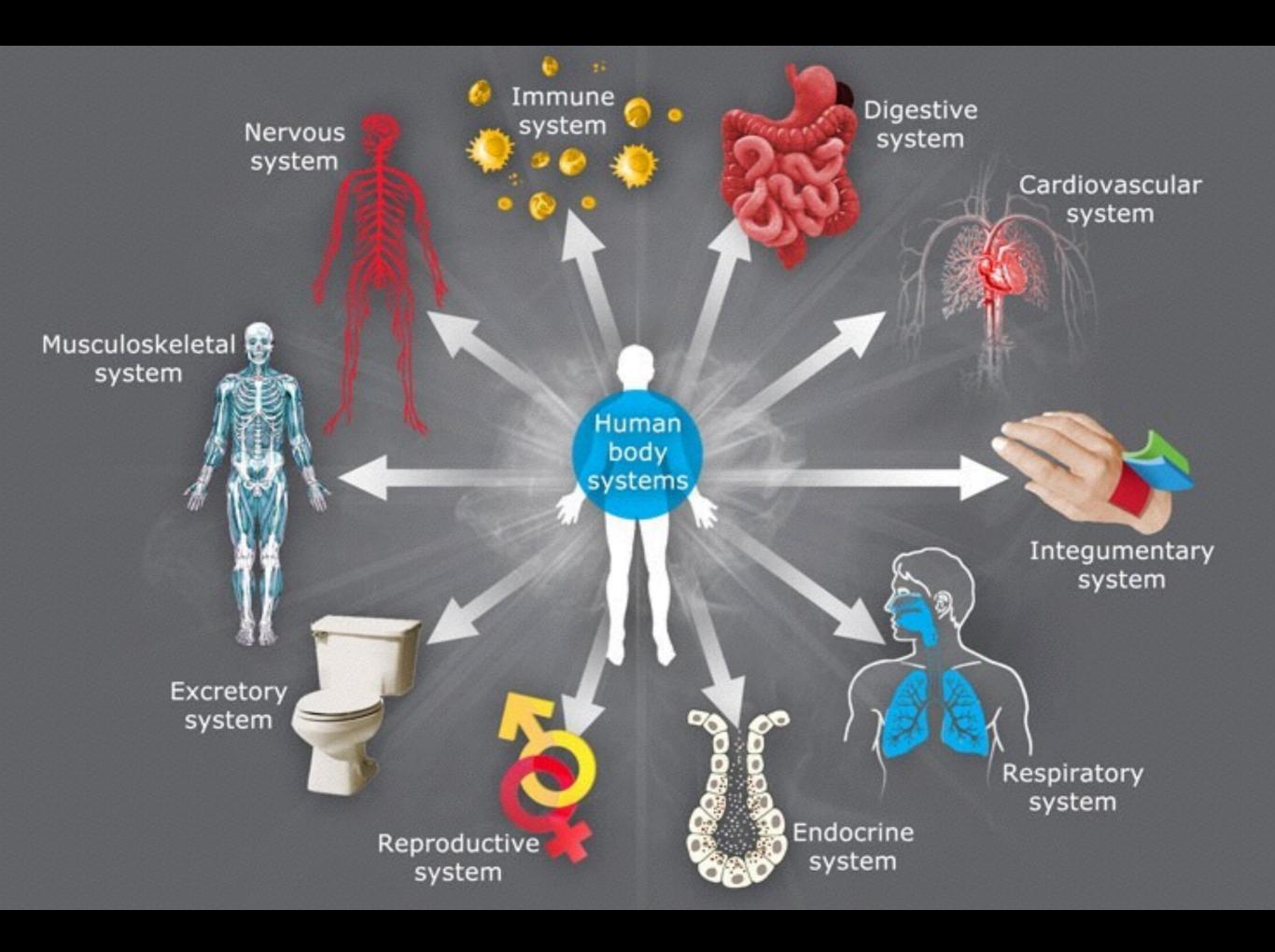
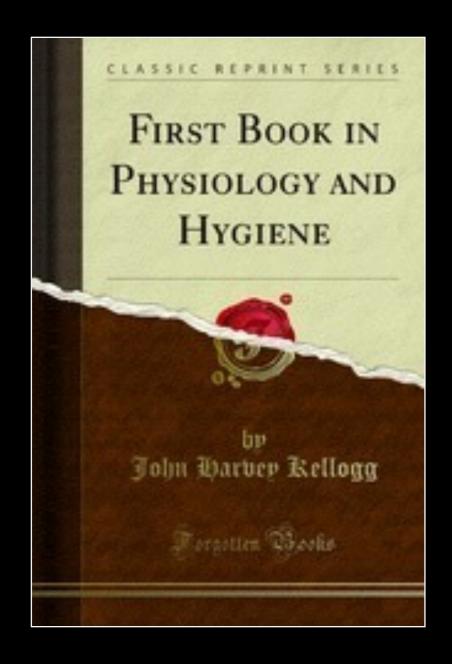
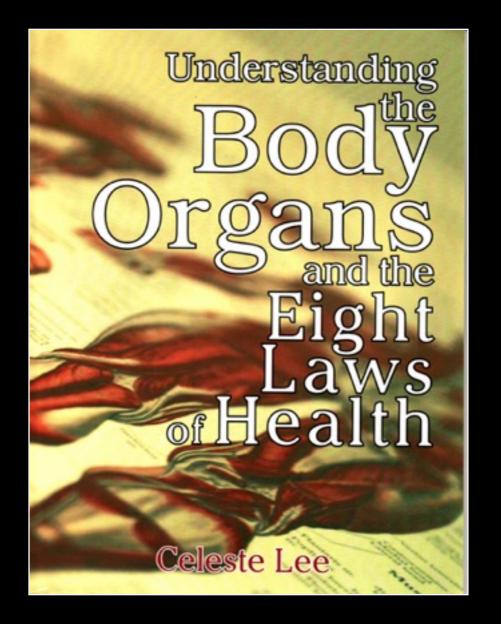


A knowledge of physiology and hygiene should be the basis of all educational effort. {Ed 195.1}









From the first dawn of reason, the human mind should become intelligent in regard to the physical structure. Here Jehovah has given a specimen of Himself, for man was made in the image of God.

The first study of the young should be to know themselves and how to keep their bodies in health. {CG 103.2 & 3}

An Illustration Of How The Body Works with Digestion







Input Stage

Intermediate Stage

Output Stage

Nature's Human Factory The Human Body

Input Function

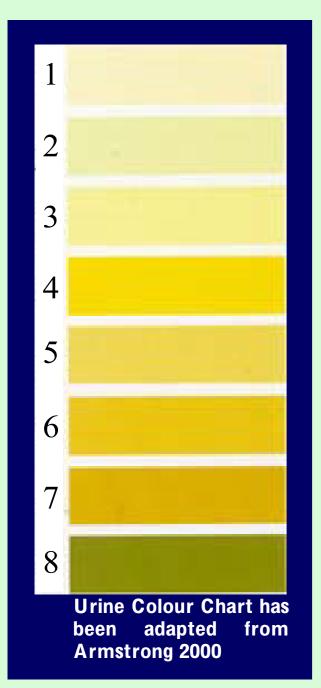
Mastication & Breathing In

#1 Output Function Perspiration

Digestion Intermediate **Function**

#2 Output Function
Urination

Urine Colour Test for Dehydration



If the water in the body is balanced, the urine will be a pale straw or lemonade colour. When water loss from the body exceeds water intake, the kidneys need to conserve water, making the urine much more concentrated with waste products and subsequently darker in color.

Dark yellow urine is a sure indicator that the individual is dehydrated and that the fluid consumption must be increased.

The aim is to produce urine no darker than colour 3 of the Urine Color Chart. Desire to urinate less than twice per day and/ or producing urine darker than colour 3 in the chart indicate severe dehydration; the individual must start drinking immediately.

Interpretation:

The urine colour should be compared to the chart to the left. The lower the number, the better the result. A urine color rating of 1, 2 or 3 is considered to be well-hydrated (Armstrong, 2000). Based on these results, changes in fluid intake can be made.

Precautions:

Certain medicines and vitamins may cause the colour of the urine to change. If any of these have been taken, this test is unreliable.

The colours your see on this chart should only be used as a guide. If more accurate comparison is required, please go to an original source.

Dehydration

Dehydration occurs when a person's body loses too much water. When a person stops drinking water or loses large amounts of fluids because of diarrhea, vomiting, or sweating, the body reabsorbs fluid from the blood and other body tissues.

Nature's Human Factory The Human Body

Input Function

Mastication & Breathing In

#1 Output Function Perspiration

Digestion Intermediate **Function**

#2 Output Function
Urination

3 Output Function
Defication

Bristol Stool Chart

Type 1



Separate hard lumps, like nuts (hard to pass)

Type 2



Sausage-shaped but lumpy

Type 3



Like a sausage but with cracks on the surface

Type 4



Like a sausage or snake, smooth and soft

Type 5



Soft blobs with clear-cut edges

Type 6



Fluffy pieces with ragged edges, a mushy stool

Type 7



Watery, no solid pieces. Entirely Liquid

Nature's Human Factory The Human Body

Input Function

Mastication & Breathing In

#1 Output Function Perspiration

Digestion Intermediate **Function**

#4 Output Function Exhilation

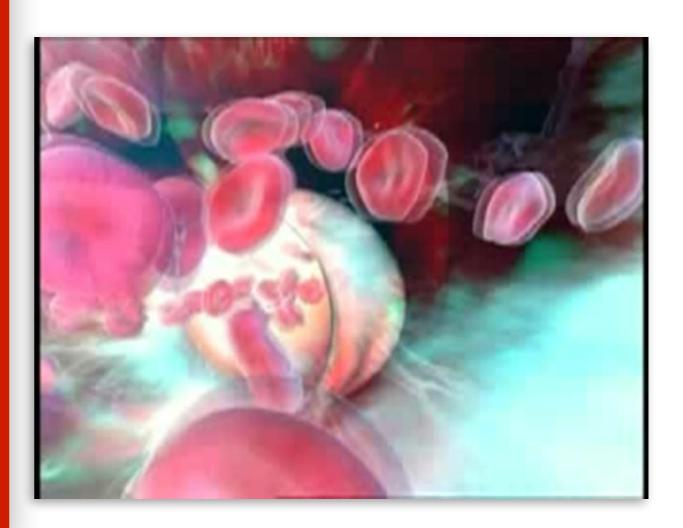
#2 Output Function
Urination

3 Output Function
Defication

•The Top Four:

- Bring Oxygen
- Bring Water
- Bring Nutrients
- Remove Waste

Leviticus 17:11 For the life of the flesh is in the blood...





The Original Diet

And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat.

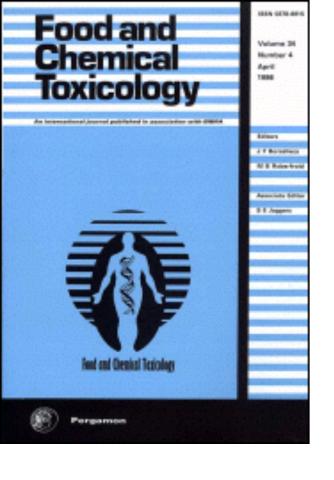
Genesis 1:29











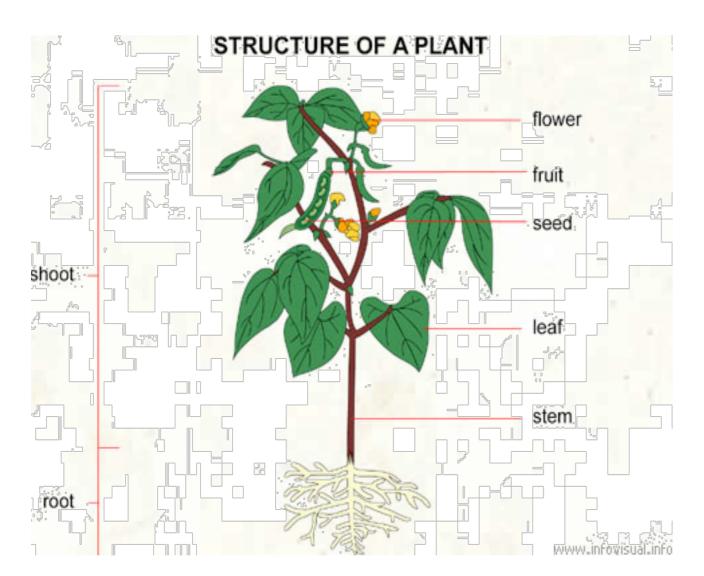
Food and Chemical Toxicology (FCT) publishes original research articles, reviews, and case reports on the toxic effects, in animals or humans, of natural or synthetic chemicals occurring in the human environment with particular emphasis on food safety, chemical safety, and other areas of consumer product safety.

"The health effects of a Roundup-tolerant genetically modified maize (from 11% in the diet), cultivated with or without Roundup, and Roundup alone (from 0.1 ppb in water), were studied 2 years in rats. In females, all treated groups died 2–3 times more than controls, and more rapidly. This difference was visible in 3 male groups fed GMOs. All results were hormone and sex dependent, and the pathological profiles were comparable. Females developed large mammary tumors almost always more often than and before controls, the pituitary was the second most disabled organ; the sex hormonal balance was modified by GMO and Roundup treatments. In treated males, liver congestions and necrosis were 2.5–5.5 times higher."

The Original Diet

...thou shalt eat the herb of the field;.

Genesis 3:18b





And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul.





From Elements To Man

All the elements from the dust is found in man: Magnesium, Phosphorus, Calcium, Potassium, Sodium, Iron, Iodine, Chlorine, Sulfur, etc

Therefore we should choose foods that come from a root system.





Nutrition



What our body needs for proper

nutrition?

Carbohydrates

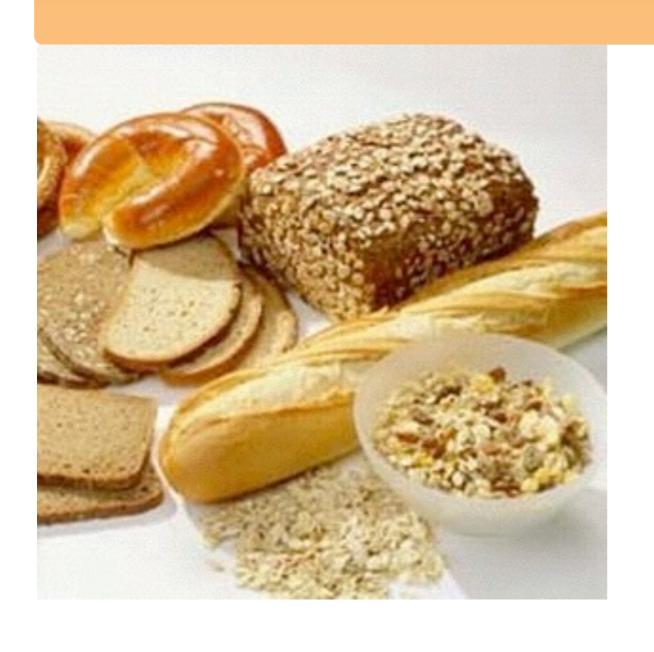
Proteins

Fats

Vitamins and Minerals

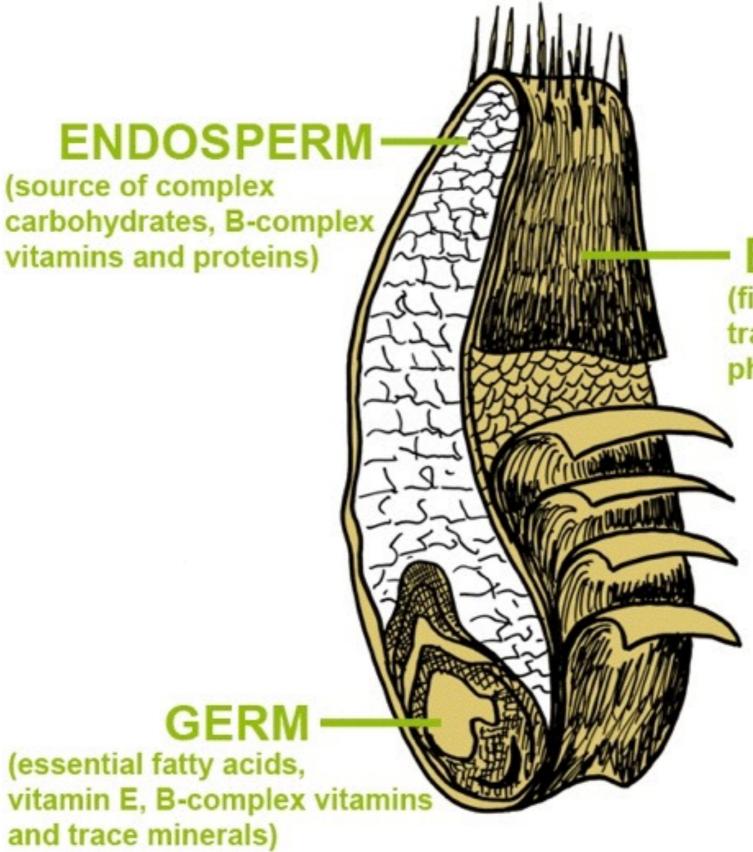


Breads and Cereals



These foods have a high complex carbohydrate content and provide the body with energy sources: whole grain bread, hot cereals, pasta, and brown rice.

The Whole Grain Kernel



BRAN

(fiber, B-complex vitamins, trace minerals and phytonutrients)

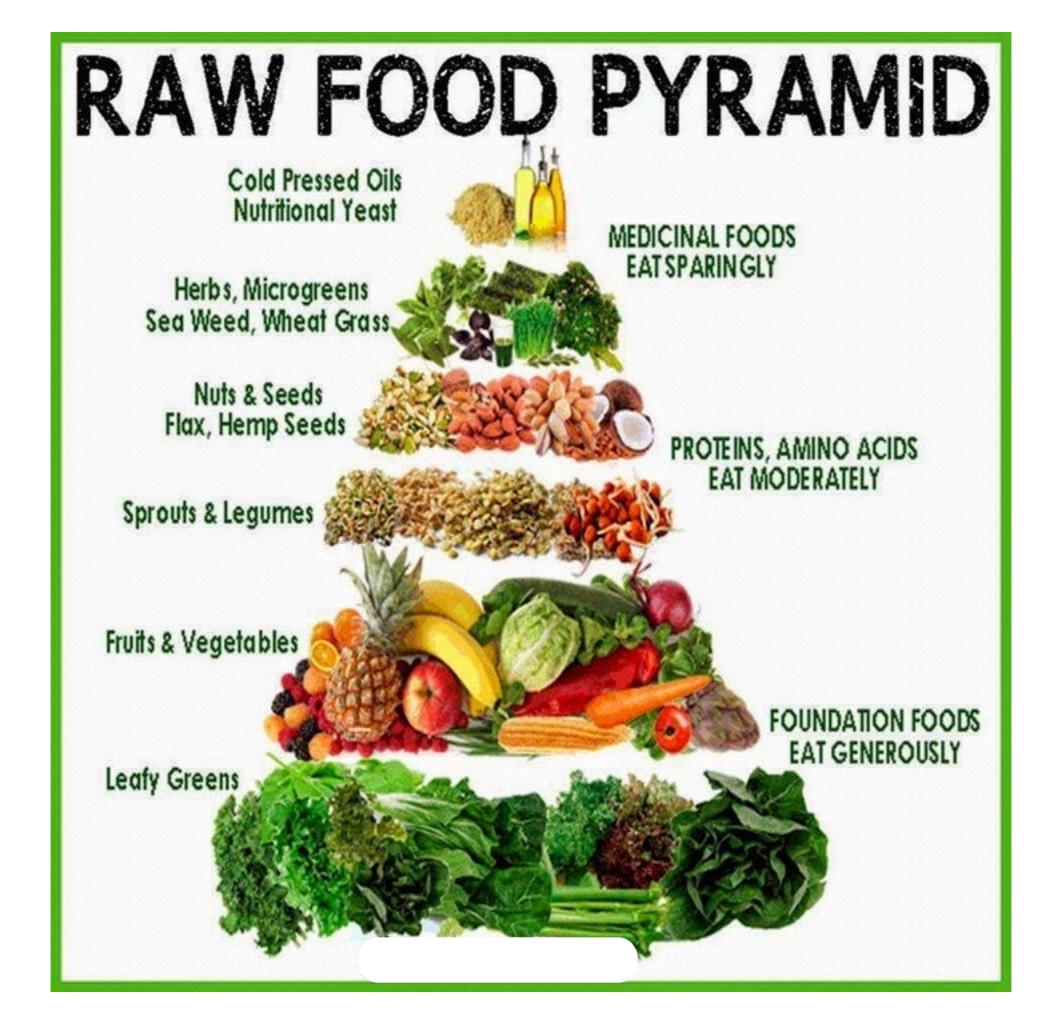


Fruits and Veggies

A diet high in fruits and vegetables has been linked to many health benefits, including:

- Healthier body weight
- Lower blood pressure
- Less risk of diabetes
- Combats certain cancers
- Better digestion
- Heart health
- Clear skin
- Shiny hair









Rules for Cooking Vegetables

General guidelines for cooking vegetables without losing nutrients Comparing the healthfulness of cooked food is complicated. A cooking method might destroy one nutrient but increase the absorption of another. And much is still unknown about how different plant molecules interact with the human body. Some general preparation guidelines will serve you well:

Steaming is the best overall route to maximize antioxidants in many vegetables, particularly cruciferous vegetables such as broccoli and cabbage. Think lightly steamed, as prolonged heating can destroy fiber and nutrients.

Pressure cooking and boiling also are good for preserving antioxidants in vegetables such as carrots, spinach, mushrooms, asparagus, peppers and others, but cooks should guard against leaching out vitamins and nutrients -- as much as 80 percent in broccoli -- in the cooking water. The rule here is a short cooking time, with as little water as possible, for maximum benefits.

How much should I have?





Types of legumes include beans, lentils and peanuts. Legumes provide fiber, folate, potassium and iron. Legumes are also recommended as a healthy alternative to animal-derived foods because of its high-protein content.



PROTEIN

Why do we need protein in our diet?

What is protein? What does it do for us? And where do we find it in our foods? Proteins come in many different forms and have many different functions, for example:

- Part of your DNA your genetic inheritance! Proteins combine with nucleic acids to form nucleoproteins, in the nucleus of every cell in your body;
- Enzymes These are the proteins which make everything happen, e.g. to break down food for absorption; to regulate the entry of nutrients through cell walls, and the remov of waste-products; to grow, develop, move, reproduce. (Many enzymes also need spec vitamins and minerals to function);
- Haemoglobin the protein which, with iron, carries oxygen around your body;
- Myoglobin and elastin These are the two main proteins in muscle fibres;
- Bones are mainly proteins, with calcium, magnesium and phosphate;
- Hormones which send chemical messages between nerve cells and to regulate metabolism;
- Antibodies which circulate in your blood to protect you against viruses; and
- Keratin which forms your hair and nails

Animal Based Protein





The Washington Post

Too much protein could lead to early death, study says

March 04, 2014

"We provide convincing evidence that a high-protein diet particularly if the proteins are derived from animals - is
nearly as bad as smoking for your health," one of the
academics behind the work, Dr Valter Longo, of the
University of Southern California says.

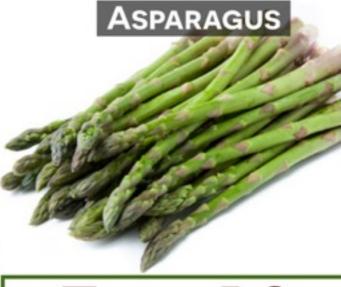






PEAS





Top 10
Plant*
Based
Proteins



Broccoli



PUMPKIN SEEDS



HEMP SEEDS

SUNFLOWER SEEDS



Fats

 Those which occur naturally in plant foods. Good whole food sources of fats are whole grains, nuts, beans, seeds, avocados, and olives. If oil is used, less refined and fresher oils(coconut, Grape seed, and olive oil) are better in small quantities.





Fats

Like protein, but not carbohydrates, fat is essential to human life, we all need fat in our diets:

- Fat is a concentrated source of energy 1 gram of fat contains 9 calories, much more than a gram of protein or carbohydrate which both contain 4 calories per gram. The body can pull on its fat reserves during lean times for energy, converting fat into glucose.
- Fat provides a cushion to help protect our vital organs without fat our organs would be more prone to damage. Furthermore, fat acts as an insulator, helping us to maintain the correct body temperature.
- Fat enables our bodies to process vitamins A, D, E and K, which are all fat soluble and vital to good health. (More on Vitamins)
- Like amino acids in protein, fat contains essential fatty acids (EFA's). These EFA's are, as their name suggests, essential to good health and likely to help the heart and immune system. The human body cannot make its own (synthesize) these EFA's and therefore has to get them from consumption of fat.
- Some fatty acids like omega 3 may provide other health benefits such as complimenting the cognitive processes of the brain.

Although we need fat, we only need **small quantities** of the right kinds of fat to stay healthy.

Consuming too much fat and the wrong kind of fat can be detrimental to our health.

FATS



BAD FAT



GOOD FAT

The Good Guys

The Bad Guys

Unsaturated Fats:

Polyunsaturated fatty acids & Monounsaturated fats

Benefits:

Reduce heart disease Antioxidants Vitamin E Lower cholesterol

Sources:

Vegetable oils

Fatty fish

Flaxseeds

Walnuts

Olives

Olive Oil

Almonds

Avocado

Brazil Nuts

Cashews

and more....

Saturated Fats:

Trans fat & Hydrogenated fat/oil

Disadvantages:

Raise cholesterol Clog arteries Increase risk of heart disease

Sources:

Animal products Dairy Butter

Fried food

Lard

Packaged foods and more....

A study by scientists at the Fred Hutchinson Cancer Research Center in Seattle linked eating a lot of oily fish or taking potent fish oil supplements to a 43% increased risk for prostate cancer overall, and a 71% increased risk for aggressive prostate cancer. Their report was published online in the Journal of the National Cancer Institute.

Cooking with Oils

Best Oils to Cook With (400 +)

No Cook or Low Cook Oils (200-)

Cocunut Oil

Red Palm Oil

Almond Oil

Avocado Oil

Walnut Oil

Peanut Oil

Grapeseed Oil

Flax Seed Oil

Virgin Olive Oil

Evening Primrose Oil



Grains, fruits, nuts, and vegetables constitute the diet chosen for us by our Creator. These foods prepared in as **simple** and **natural** a manner as possible, are the most healthful and nourishing. They impart a strength, a power of endurance, and a vigor of intellect, that are not afforded by a more complex and stimulating diet. {CD 310.2}

KAYLA'S CAKE



KAYLA'S CUPCAKES



KAYLA & JADA'S BISCUITS & GRAVY w. SCRAMBLED TOFU



10 Generations Before The Flood

Adam
 930 years

Seth
 912 years

Enos 905 years

Cainan 910 years

Mahalaleel 895 years

Jared 962 years

Enoch 365 years

Methuselah 969 years

Lamech 777 years

Noah
 950 years

Genesis 5

Avg. Life Span 912 years

10 Generations After The Flood

Shem

Arphaxad

Salah

Eber

Peleg

Serug

Nahor

Terah

Abraham

600 years

438 years

433 years

464 years

239 years

230 years

148 years

205 years

175 years

Genesis

11:10-26, 25:7

Avg. Life Span 317 years



What is Exercise?

- Bodily exertion for the sake of developing and maintaining physical fitness:
 - Target Heart Rate—220 age = THR
 - (Stay between 50–85% of this rate for 30–60 min)
 - Aerobic—Constant moderate intensity physical activity that requires the heart and lungs to work harder to meet the body's increased oxygen demand (Bicycling, Walking)
 - Anaerobic—Exercise in which oxygen is used up more quickly than the body is able to replenish it inside the working muscle. (Push-ups, Pull-ups)

Burning Calories

Raking, bagging and carrying leaves can burn about 330 calories per hour. Clearing and digging can burn approximately 400. Using a manual mower can burn about 490 calories, while a power mower would only burn 300. Laying sod, pulling weeds and planting trees can use up to 360 calories.

Yard work also helps to relieve stress, providing time for problem solving or daydreaming. Seeing the results of your work can also give you a feeling of accomplishment.

Similarities between yard work and traditional exercise

Push mowers exercise leg, arm and shoulder muscles

Digging involves weight lifting, abdominal stretching and squatting

Digging requires as much energy as aerobics and swimming

Weeding involves forearm stretches and squatting

Carrying wood, clearing land, hauling branches and laying sod give you a workout equivalent to stationary bicycling

You can burn as many calories in 45 minutes of yard work as in 30 minutes of aerobics

Benefits of Exercise

- Increased Respiration & Circulation
- Clear Mind
- Increased Digestion
- Weight Management
- Decreased Health Risks
- Increased Strength
- Healthy Skin
- **Bone Density**
- Healthy Heart
- Healthy Hair





Early Symptoms of Dehydration

Headache Fatigue Confusion Loss of Appetite Flushed Skin **Heat Tolerance** Light-headedness **Cotton Mouth** Dry Eyes Skin Tightness Abdominal Pain

How Much Do We Really Need?

½ of your body weight in fluid ounces

200lbs x .5 = 100 floz 200lbs
$$\div$$
 2 = 100 floz



It was observed that consumption of "hard" water, or water containing dissolved solids, is associated with possible cardiovascular effects. As noted in the American Journal of Epidemiology, consumption of hard drinking water is negatively correlated with atherosclerotic heart disease.[16]





I should bathe frequently, and drink freely of pure, soft water. {CD 419.2}

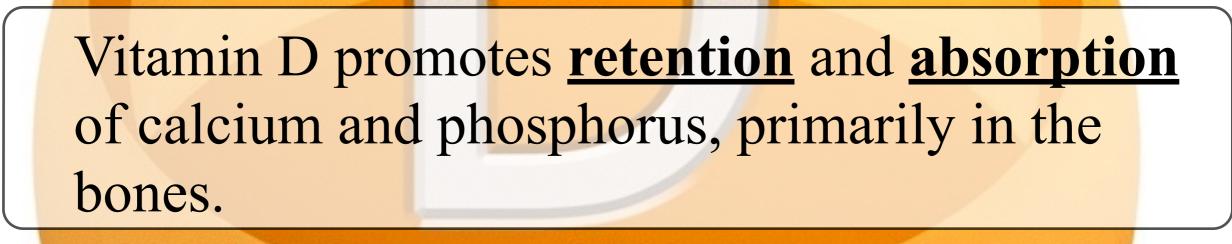


If we do not drink enough water the body will take from the following areas:

- BONES
- LIVER
- SKIN
- COLON
- BRAIN







Vitamin

Stanford University California



A recent study found that sunlight <u>enhances</u> the immune system against invading germs and sun-induced skin damage. The T cells of the immune system are responsible for fighting against infections and cancer, but their activity is <u>triggered</u> by information about the threat. These are brought by the <u>dendritic cells</u>, which ingest infected and damaged cells and transport the regurgitated pieces to T cells.

If the T cells perceive foreign elements, they <u>multiply</u> and the huge number of T cells <u>destroys infected cells</u>. But scientists were puzzled how T cells could receive information from all around the body.

Stanford University California



Previous research on the gut found that dendritic cells expel a compound that induces T cells to generate a receptor that <u>helps</u> them head for the intestine.

A team led by immunologist Eugene Butcher at Stanford <u>University</u>, California, found <u>a similar immune process in human skin</u>.

Under the action of sunlight, skin cells produce an inert form of <u>vitamin</u> D, which was long thought to become active and thus usable by the body after processed by the kidney and liver. But the team found that dendritic cells in the skin can do it. The "active" vitamin D3 reaches nearby T cells, inducing them to generate receptors specific to skin chemokines.(Attractant to guide cells)

Prevention the Best Cure

- Adequate Sunlight (Vitamin D) Equates
 To:
 - 50% reduced risk of breast cancer
 - 43% reduced risk of hip fracture
 - 80% reduced risk in colon cancer
- Inadequate Sunlight (Vitamin D) Equates
 To:
 - ->50% increased risk of heart attack

How Much Do We Need?

Light Skinned—30 Minutes p/day

Dark Skinned—60 Minutes p/day

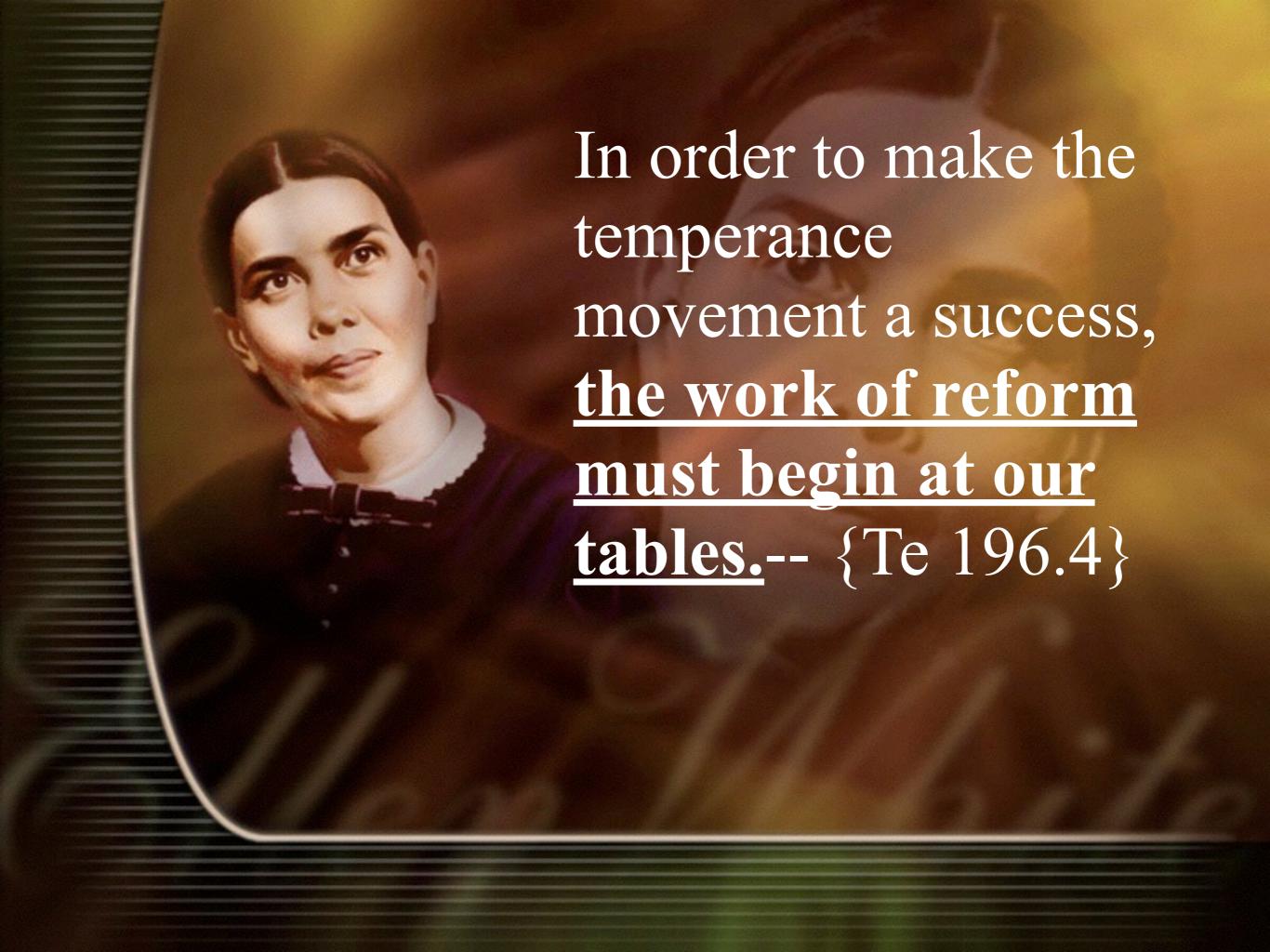
Without Sunscreen (SPF 8 or more blocks UV rays needed to synthesize Vitamin D)

Face; Neck, Arms Exposed Don't Burn



Temperance (Self Control)











Keep Toxins Out

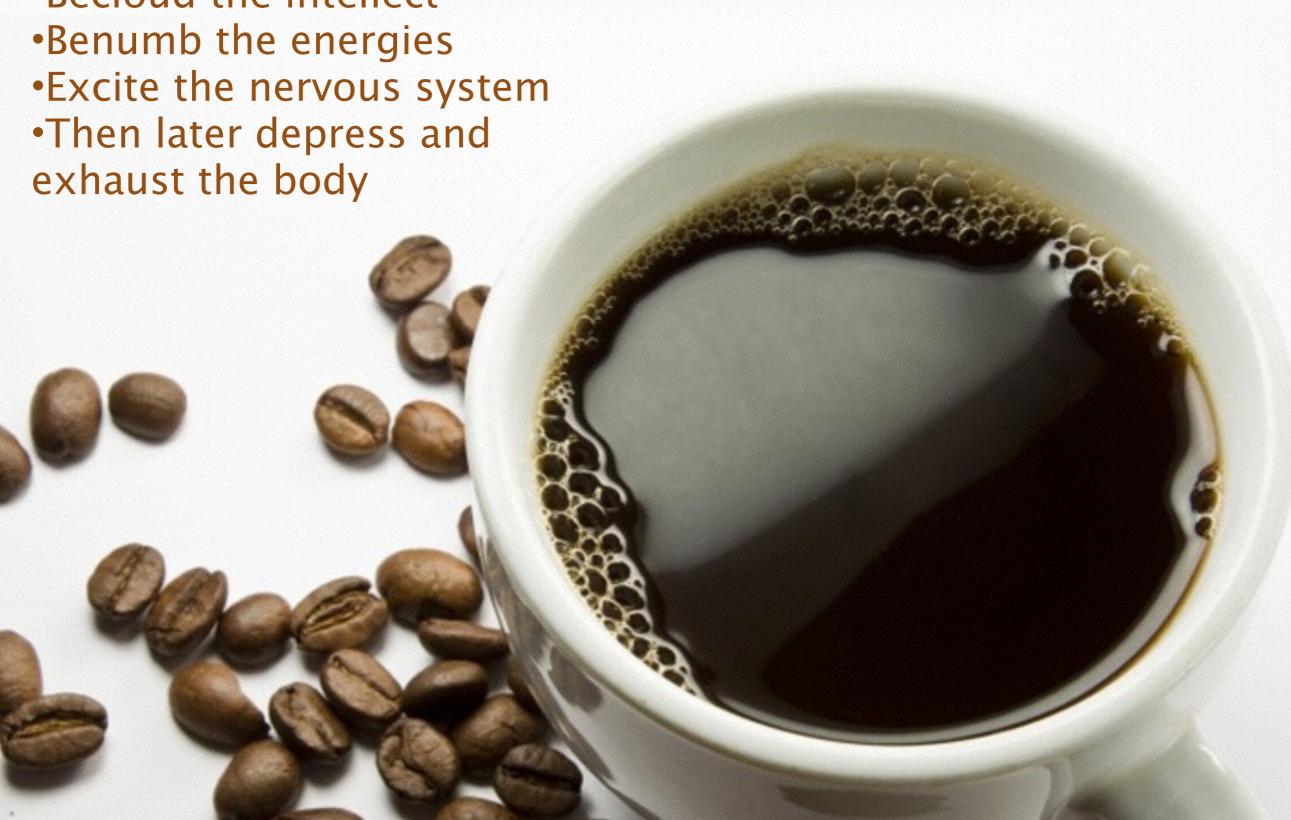




Coffee affects the function of cells!!!



Becloud the intellect









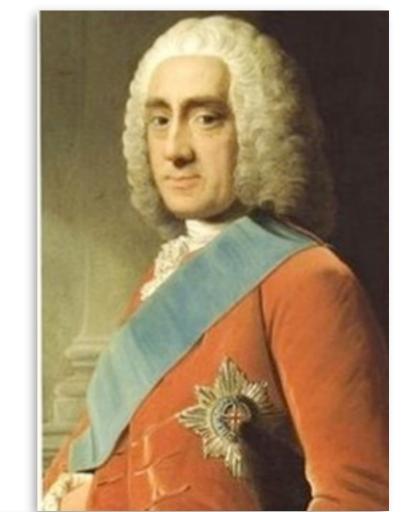
• Sugar robs your body of B vitamins.

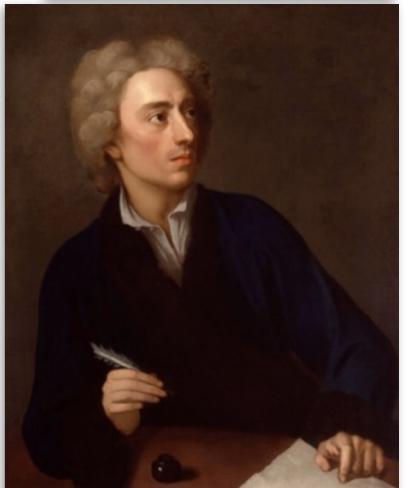
(B vitamins are necessary for a healthy nervous system)

• Sugar contains no nutrients, but it requires nutrients to metabolize sugar.

- "Regularity in the hours of rising and retiring, perseverance in exercise, adaptation of dress to the variations of climate, simple and nutritious aliment, and temperance in all things are necessary branches of the regimen of health". Lord Chesterfield
- "Health consists with temperance alone". Alexander Pope
- "True temperance teaches us to dispense entirely with everything hurtful and to use judiciously that which is healthful".

Temperance p. 138





Temperance or Intemperance

Nutrition:

- I ate breakfast at 8am and I feel hungry at 10am...
 so I eat again.

 INTEMPERANCE
- I am a total vegetarian, I don't eat meat, dairy, or eggs. I am healthy. Today for breakfast I had 3 apples, 2 bowls of cereal, ¼ cup of raisins, 1 banana, 4 slices of bread and butter, and a smoothie.
- It is time for dinner and I am starving. I eat salad w/olives, rice and beans, sautéed cabbage and onions. Tastes fantastic! Time for plate number two. I realize I am roughly 80% full but could eat lots more. I decide I've had enough.

TEMPERANCE

Temperance or Intemperance

Exercise:

- I feel fit and exercise once a week for 1hr.
- INTEMPERANCE
- I work construction and spend two-hours workingout at the gym every day after work.

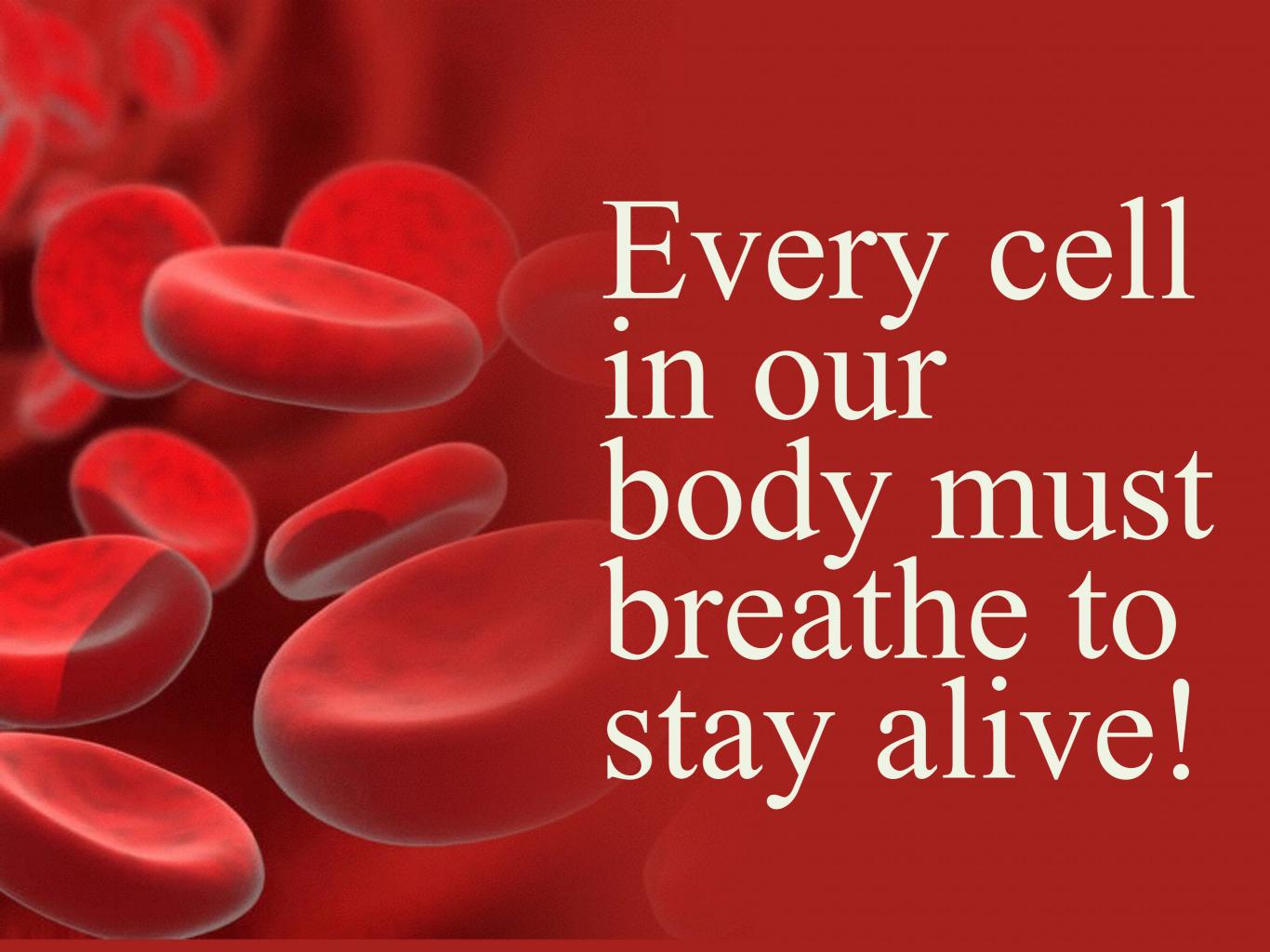
INTEMPERANCE

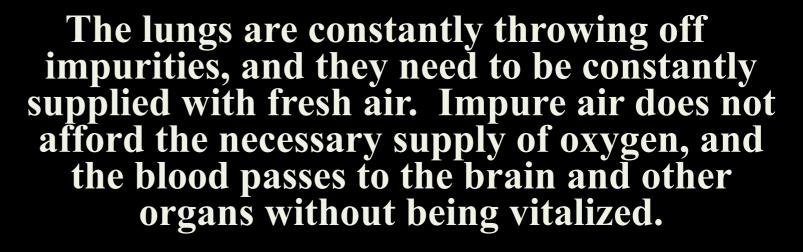
- I walk briskly every morning and get intense workouts at least three times per week.
- Water: TEMPERANCE
 - I weigh about 200lbs and drink 10-12 glasses of water p/day

TEMPERANCE

 I get plenty of water. I'm perfectly hydrated. I drink 3 Vitamin Waters, 4 cups of coffee, 1 diet coke, and 1 red bull every day. INTEMPERANCE





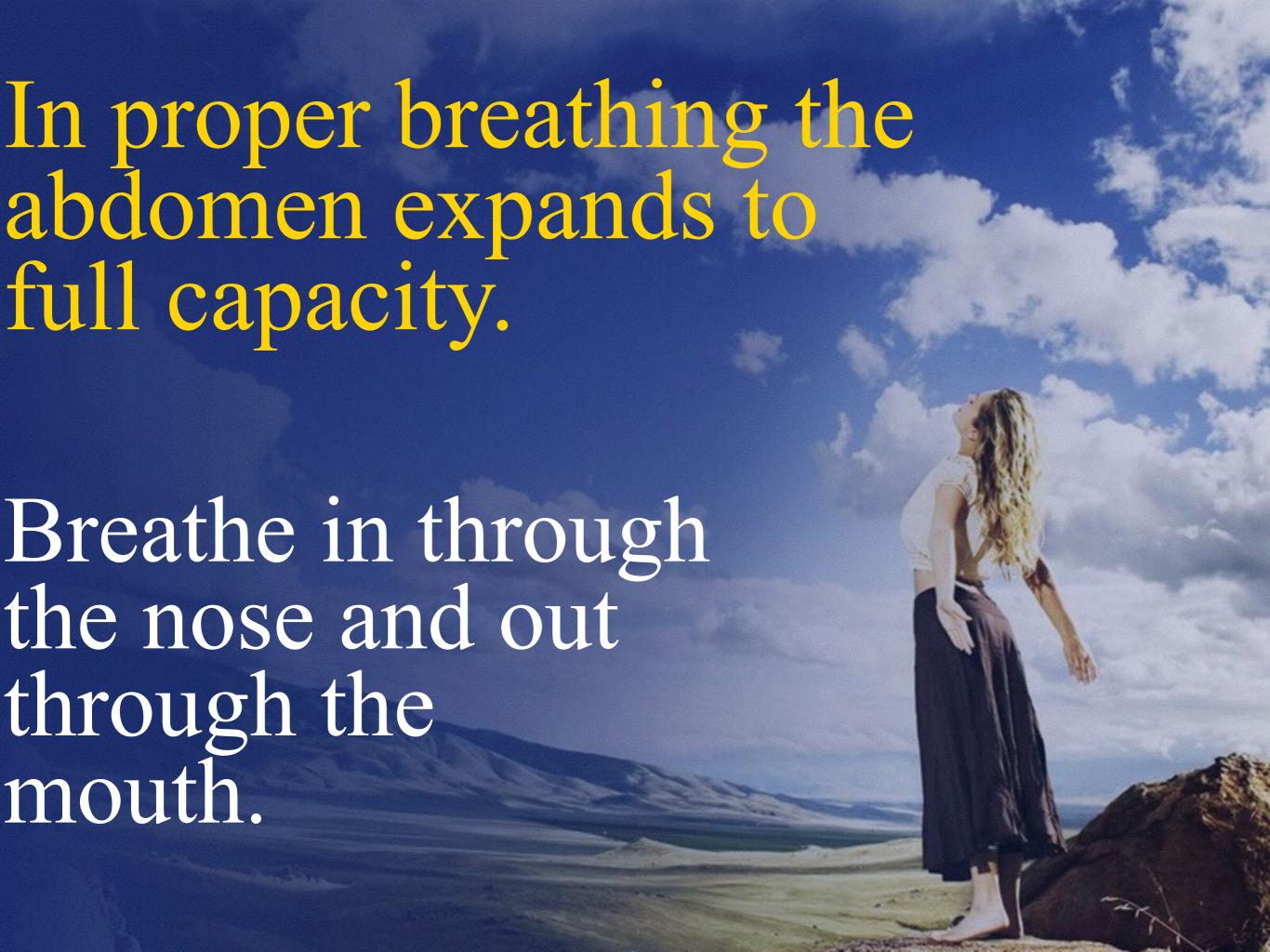


Hence the necessity of thorough ventilation. To live in close, ill-ventilated rooms, where the air is dead and vitiated, weakens the entire system. It becomes peculiarly sensitive to the influence of cold, and a slight exposure induces disease. It is close confinement indoors that makes many women pale and feeble. They breathe the same air over and over until it becomes laden with poisonous matter thrown off through the lungs and pores, and impurities are thus conveyed back to the blood.

{MH 274.1}

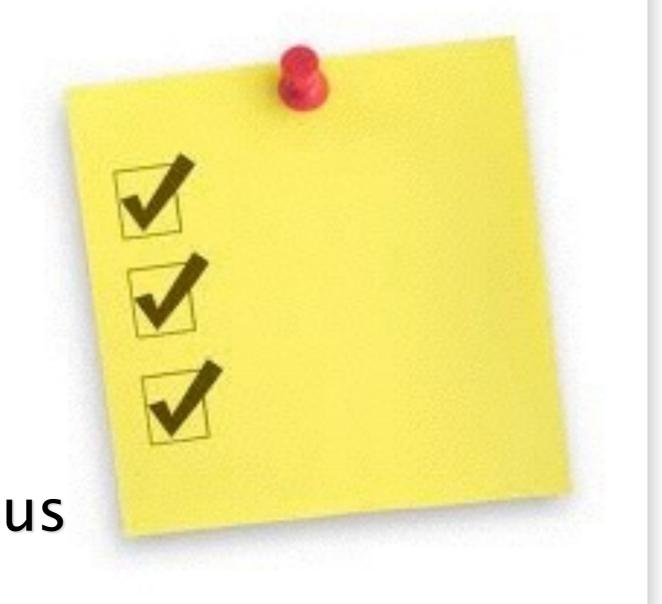
In order to have good blood, we must breathe well. Full, deep inspirations of pure air, which fill the lungs with oxygen, purify the blood. They impart to it a bright color and send it, a life-giving current, to every part of the body. A good respiration soothes the nerves; it stimulates the appetite and renders digestion more perfect; and it induces sound, refreshing sleep. {MH 272.1}





WHAT TO DO

- Breathing Exercises
- House Plants
- Cross Ventilation
- Exercise
- Ventilation Times
- Eliminate the Obvious



HOUSEPLANTS THAT WILL DETOXIFY THE AIR IN YOUR HOME



Areca Palm

removes indoor chemical toxins



Ficus Alii

removes toxins to purify the air



Lady Palm

improves indoor air quality



Dracaena Janet Graig

removes trichloreoethylene



Dwarf Date Palm

removes indoor air pollutants, particularly xylene



Bamboo Palm

removes traces of benzene, trichloroethylene and formaldehyde within the home



removes indoor air pollutants, particularly formaldehyde

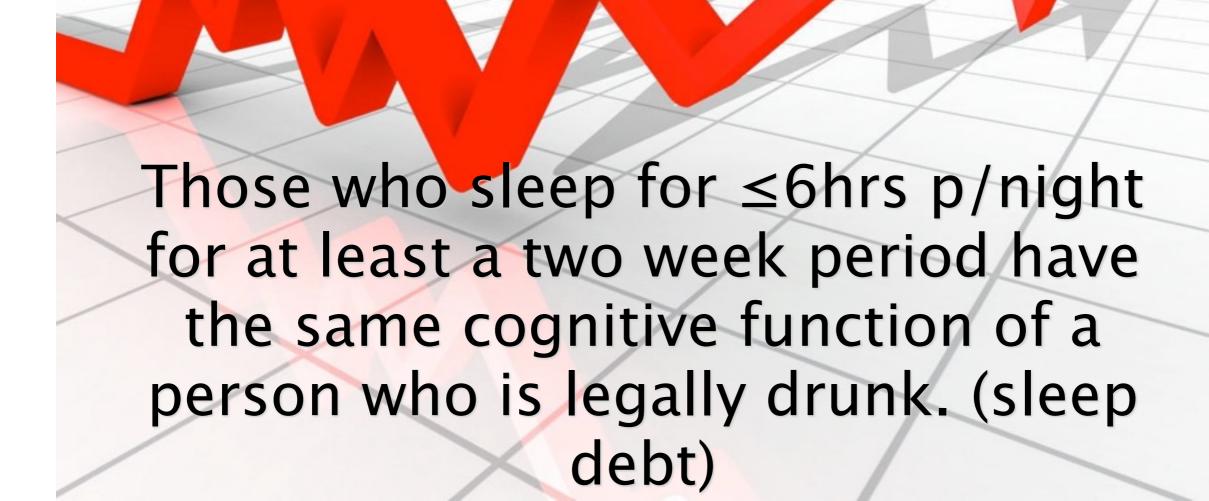


Peace Lily

removes alcohols, acetone, trichloroethylene, benzene and formaldehyde from indoor air



The Bottom Line



THE UNIVERSITY OF CHICAGO



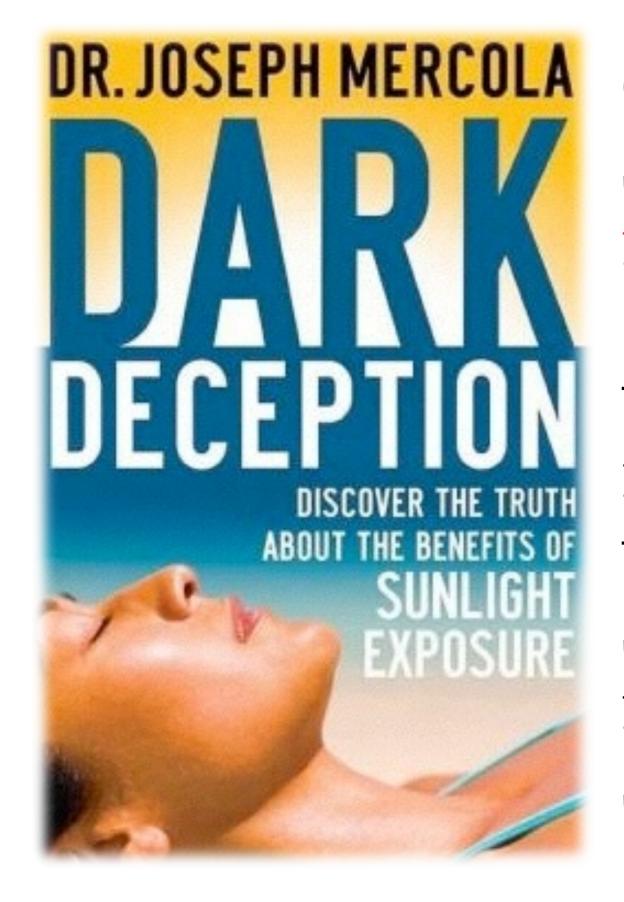
Dr. Eve Van Cauter is a sleep science trailblazer whose research team at the University of Chicago recently published the first study to specifically examine the physical health impact of ordinary sleep deprivation. She calls the impact of sleep debt on the body,

"astonishing."

THE UNIVERSITY OF CHICAGO



After four hours of sleep for six consecutive nights, healthy young men had blood test results that nearly matched those of diabetics. Their ability to process blood sugar was reduced by 30 percent, they had a huge drop in their insulin response, and they had elevated levels of a stress hormone called cortisol, which can lead to hypertension and memory impairment.



Go to bed around the same time each night, ideally around 10 PM. But take time before that to prepare. Some researchers even feel that every hour of sleep before midnight is equal to two hours of sleep after midnight.

Best Time to Sleep

Two hours' good sleep before twelve o'clock is worth more than four hours after twelve o'clock. . . . {7MR 224.3}

Benefits of Good Sleep

- · Rebuilds the cells of your body.
- Refreshes the Brain
- Chases away fatigue.
- Enhances the cleansing process
- Healing takes place.
- Growth hormones released.
- Reinforces your character structure.
- Vital Energy is Restored.



Serotonin – Sleep Hormone

- Hormone secreted by a Pineal gland, Hypothalamus, in the brain.
- Highest secretion between 10–11pm during sleep.
- Serotonin affects:
 - Mood
 - Carbohydrate craving
 - Sleep quality
- One cannot make it up for lost sie
- 50% reduction in T-cells by loosing a half a nights sleep. (Important for immune system)

In daylight hours, the pineal gland synthesizes serotonin. In the absence of light, it converts serotonin to melatonin--the serotonin level falls and the melatonin level rises at night. The balance between serotonin and melatonin seems to affects mood and other physiological functions.

Anatomy and Physiology: The Unity of Form and Function, by Kenneth S. Saladin p. 632

How Much is Enough?

Age	Sleep Needs
Newborns (1–2mo)	10.5-18hrs
Infants (3–11mo)	9–12hrs + 30min–2hr Naps (1–4 times p/day)
Toddlers (1–3yrs)	12-14hrs
Preschoolers (3–5yrs)	11-13hrs
School-aged Children (5-12yrs)	10-11hrs
Teens (11–17)	8.5-9.5hrs
Adults	7–9hrs
Mature Adults	7–9hrs

If you can't sleep!

- Hot bath 2 hrs before going to Bed.
- Warm shower just before going to Bed
- Don't eat just before you sleep.
- Drink a cup of "Relaxing herbal Tea" (Valerian, Scullcap, Hops, Vervain, Camomile, Peppermint)
- Go for a relaxed walk for 30 minutes.
- Read some good books, which will give you peaceful mind.

- Establish consistent sleep and wake schedules, even on w/e & days off
- Create a regular, relaxing bedtime routine taking a hot bath or shower. Devotional life- 1hr or more before bedtime
- Dark (melatonin), Quiet, Comfortable & Cool
- Sleep on a comfortable mattress and pillows
- Use your bedroom only for sleep and intimacy (keep "sleep stealers" out of the bedroom – avoid watching TV, using a computer or reading in bed)
- Finish eating at least 5-6 hrs before your regular bedtime
- Exercise regularly during the day or at least a few hours before bedtime
- Abstain from the use of caffeine, tobacco, and alcohol products and other drugs/stimulants



Keys in Trusting God

Make a decision to fully surrender your heart to God. (Proverbs 23:26)

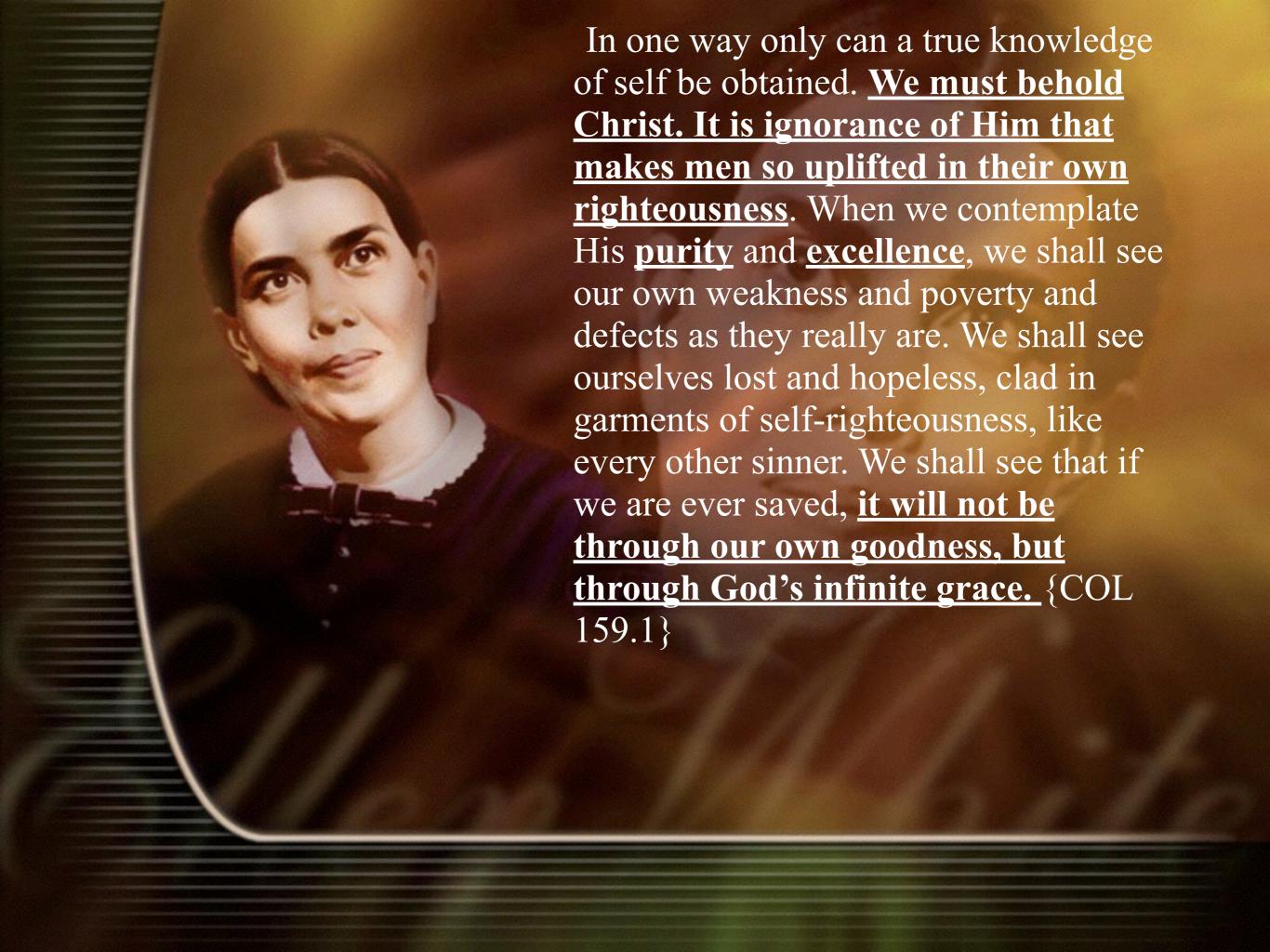
Confess and Forsake <u>all</u> known sin. (1st John 1:9)

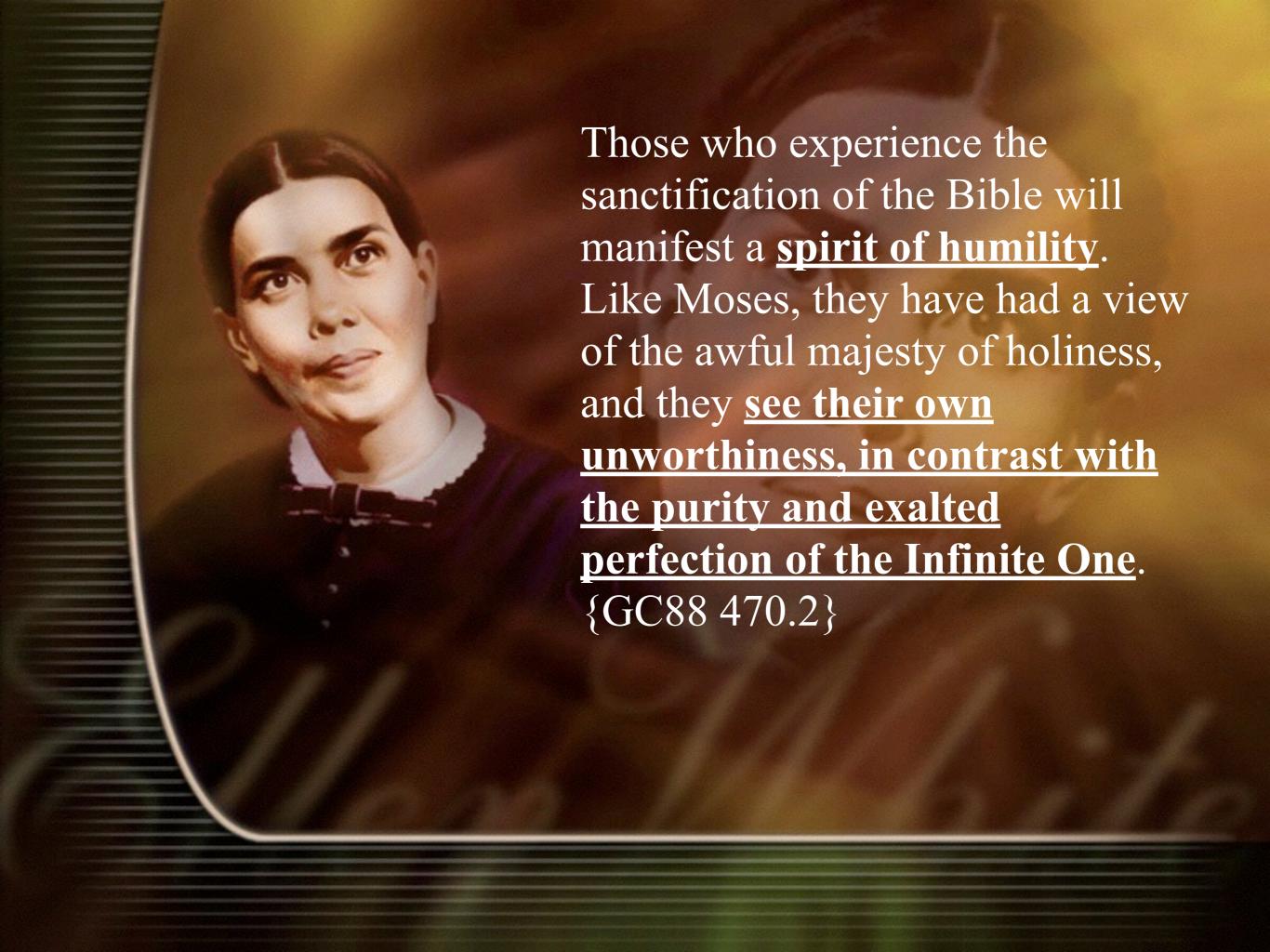
Commune with God in morning, noon, & evening devotion daily. (Psalm 55:17)

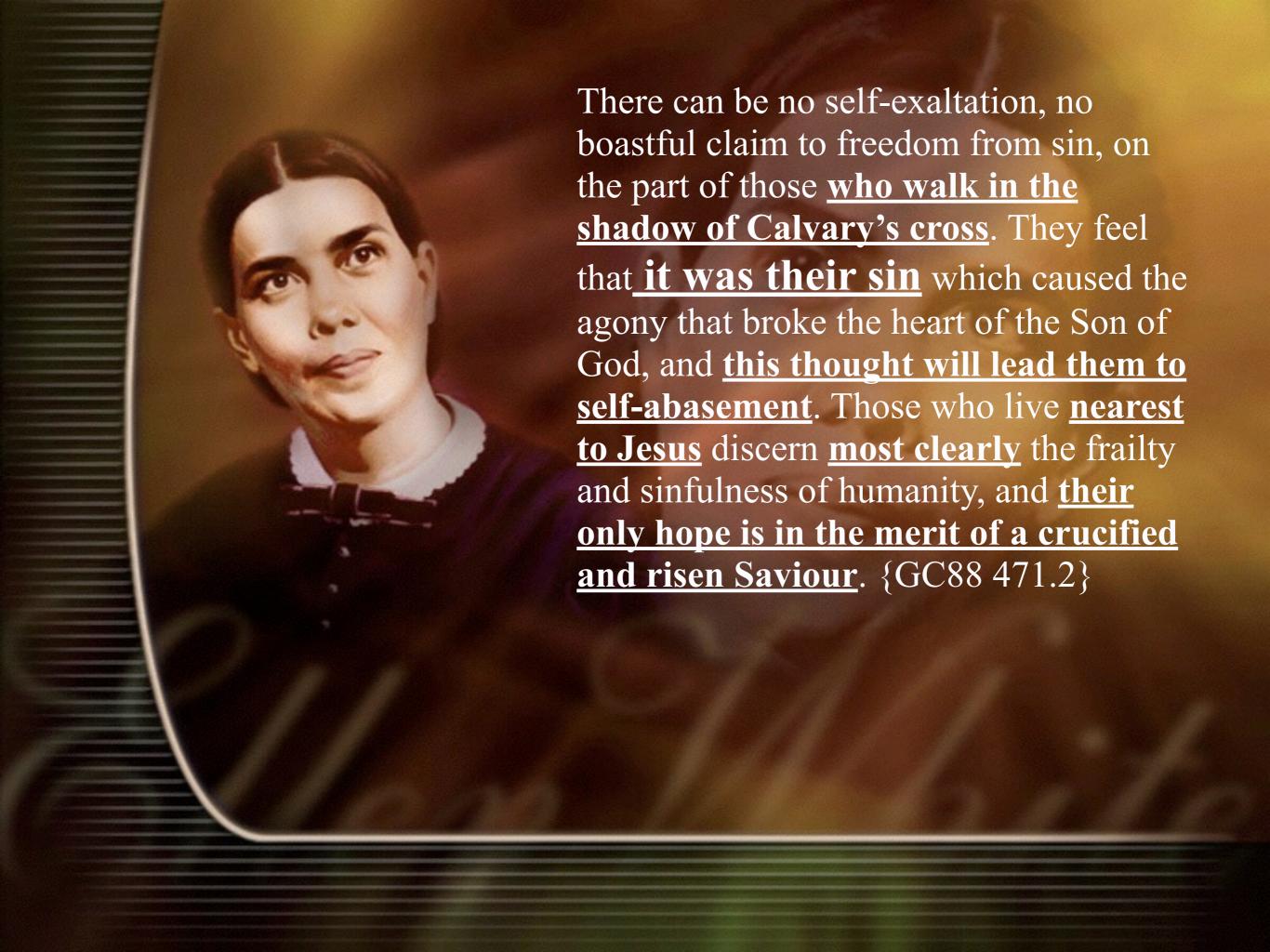
Make a habit of turning over all of your burdens, challenges, & cares to God.

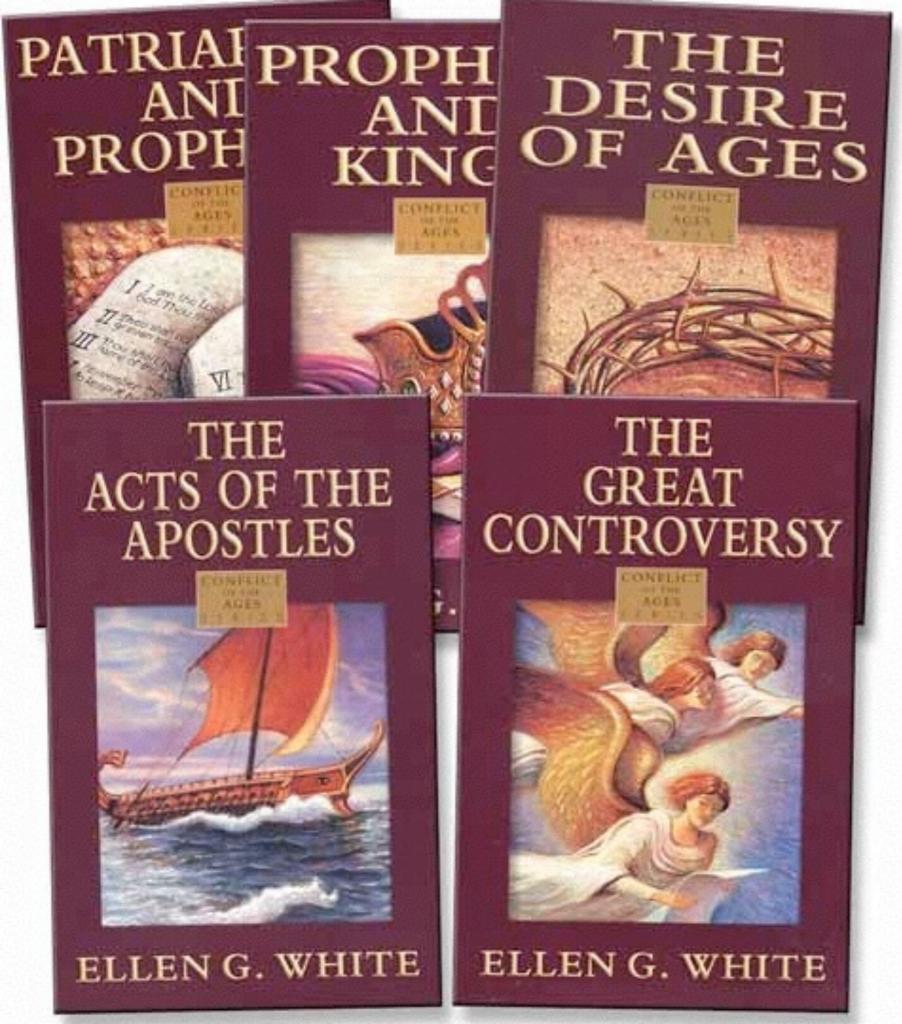
This is true "Stress Management"

(1st Peter 5:7)









Study 3 chapters of bible per day and 10 pages from your book.

- 1) What was the lesson talking about
- 2) What does it have to do with me
- 3) What did I learn of God's character

WHY IS TAKING CARE OF MY BODY SO IMPORTANT?

1st Thessalonians 5:23

And the very God of peace sanctify you wholly; and I pray God your whole spirit and soul and **body** be **preserved blameless** unto the coming of our Lord Jesus Christ.



